

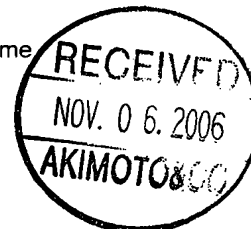
From the INTERNATIONAL BUREAU

**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rules 44bis.3(c) and 72.2)

To:

AKIMOTO, Teruo  
1-1, Minamiaoyama 1-chome  
Minato-ku  
Tokyo 1070062  
JAPON



Date of mailing (day/month/year) 26 October 2006 (26.10.2006)	
Applicant's or agent's file reference N-5002-PCT	<b>IMPORTANT NOTIFICATION</b>
International application No. PCT/JP2005/006410	International filing date (day/month/year) 25 March 2005 (25.03.2005)
Applicant NIPPON OIL CORPORATION et al	

## 1. Transmittal of the translation to the applicant.



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).



The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

## 2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

## 3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Yc
Facsimile No. +41 22 538 82 70	Express Mail Number EV 560127855 US

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference N-5002-PCT	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/JP2005/006410	International filing date ( <i>day/month/year</i> ) 25 March 2005 (25.03.2005)	Priority date ( <i>day/month/year</i> ) 25 March 2004 (25.03.2004)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant NIPPON OIL CORPORATION		

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).																								
2.	This REPORT consists of a total of 7 sheets, including this cover sheet.																								
	In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.																								
3.	<p>This report contains indications relating to the following items:</p> <table style="width: 100%;"> <tr> <td style="width: 10%; text-align: center;"><input checked="" type="checkbox"/></td> <td style="width: 40%;">Box No. I</td> <td style="width: 50%;">Basis of the report</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>	<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input checked="" type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																							
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<input type="checkbox"/>	Box No. VII	Certain defects in the international application																							
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																							
4.	The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).																								

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No. +41 22 338 82 70	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Date of issuance of this report 19 October 2006 (19.10.2006)</td> </tr> <tr> <td style="padding: 5px;">Authorized officer  <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Yoshiko Kuwahara</div></td> </tr> <tr> <td style="padding: 5px;">e-mail: pt07@wipo.int</td> </tr> </table>	Date of issuance of this report 19 October 2006 (19.10.2006)	Authorized officer  <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Yoshiko Kuwahara</div>	e-mail: pt07@wipo.int
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Authorized officer  <div style="text-align: center; font-weight: bold; font-size: 1.2em;">Yoshiko Kuwahara</div>				
e-mail: pt07@wipo.int				

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

**TRANSLATION**

**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing  
(day/month/year)

Applicant's or agent's file reference

**N-5002-PCT**

**FOR FURTHER ACTION**

See paragraph 2 below

International application No.

**PCT/JP2005/006410**

International filing date (day/month/year)

**25.03.2005**

Priority date (day/month/year)

**25.03.2004**

International Patent Classification (IPC) or both national classification and IPC

Applicant

**NIPPON OIL CORPORATION**

1. This opinion contains indications relating to the following items:

- |                                     |              |  |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the opinion   |
| <input type="checkbox"/>            | Box No. II   | Priority   |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |
| <input checked="" type="checkbox"/> | Box No. IV   | Lack of unity of invention   |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited  |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application   |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application  |

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/006410

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language  
\_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/006410

Box No. IV

Lack of unity of invention

1. ☐ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:
- ☐ paid additional fees
  - ☐ paid additional fees under protest
  - ☐ not paid additional fees
2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with
  - ☒ not complied with for the following reasons:

Claims 1-9 contain the following groups (A) to (D) of inventions:

(A) a lubricative composition for industrial machinery and equipment which comprises a base oil selected from among mineral oils, fats and oils, synthetic oils, and mixtures of two or more of them, and an additive consisting of a phosphorus-containing carboxylic acid and/or a thisphosphoric ester,

(B) a lubricative composition for industrial machinery and equipment which comprises a base oil selected from among mineral oils, fats an oils, synthetic oils, and mixtures of two or more of them, and an additive consisting of a dispersant viscosity index improver,

(C) a lubricative composition for industrial machinery and equipment which comprises a base oil selected from among mineral oils, fats and oils, synthetic oils, and mixtures of two or more of them, and an additive consisting of a compound represented by any of the general formulae (1) to (4) in claim 1, and

(D) a lubricative composition for industrial machinery and equipment which comprises a base oil selected from among mineral oils, fats and oils, synthetic oils, and mixtures of two or more of them, and an additive consisting of an ester oiliness improver.

A lubricative composition for industrial machinery and equipment which comprises a base oil selected from among mineral oils, fats and oils, synthetic oils, and mixtures of two or more of them, and an additive, which is the feature common to groups (A) to (D) of the inventions, is publicly known as disclosed in documents listed in Box V.2, and do not exceed the scope of prior art; therefore it is not corresponding to a special technical feature prescribed in PCT Rule 13.2.

Consequently, there is no technical relationship among the four groups of inventions involving one or more for the same or corresponding special technical features, and this international application includes four groups of inventions which are not so linked as to form a single general inventive concept.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

- ☒ all parts
- ☐ the parts relating to claims Nos. \_\_\_\_\_

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/006410

**Box No. V** Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

**1. Statement**

Novelty (N)	Claim	3	YES
	Claims	1-2, 4-9	NO
Inventive step (IS)	Claims		YES
	Claims	1-9	NO
Industrial applicability (IA)	Claims	1-9	YES
	Claims		NO

**2. Citations and explanations:**

Document 1: JP 2000-63866 A (Showa Shell Sekiyu Kabushiki Kaisha),  
29 February 2000

Document 2: JP 2002-265971 A (Showa Shell Sekiyu Kabushiki Kaisha),  
18 September 2002

Document 3: JP 2002-294268 A (Showa Shell Sekiyu Kabushiki Kaisha),  
09 October 2002

Document 4: JP 2002-338983 A (Showa Shell Sekiyu Kabushiki Kaisha),  
27 November 2002

Document 5: JP 59-24794 A (CIBA-Geigy AG),  
08 February 1984

Document 6: JP 10-6799.3 A (CIBA-Geigy AG),  
10 March 1998

Document 7: JP 11-217577 A (CIBA-Geigy AG),  
10 August 1999

Document 8: JP 10-338892 A (R.T. Vandarbilt Co., Inc.),  
22 December 1998

Document 9: JP 2000-336384 A (NOK Kuryuba Kabushiki Kaisha)  
05 December 2000

Document 10: JP 51-74005 A (Mitsubishi Oil Co., Ltd.)  
26 June 1976

Document 11: JP 2001-279286 A (Nippon Mitsubishi Oil Corp.)  
10 October 2001

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/006410

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

~~Continuation of-~~

Continuation of IPC of the cover page

C10N 10:02, 10:04, 30:00, 30:04, 30:06, 30:08, 30:10, 30:12, 40:02, 40:04, 40:08

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/006410

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: BOX V.2

Document 12: JP 8-134488 A (Shell Internationale Research Maatschappij B.V.),  
28 May 1996

Document 13: JP 9-111277 A (Idemitsu Kosan Co., Ltd.),  
28 April 1997

Document 14: JP 2002-97485 A (Nippon Mitsubishi Oil Corp.),  
02 April 2002

Above documents 1-14 are cited in the ISR.

A. The inventions described in claims 1-2, 4-9 do not appear to possess novelty or involve an inventive step based on documents 1-3.

Documents 1-13 describes a lubricative composition for industrial machinery and equipment which comprises mineral oils, fats and oils, synthetic oils, or mixtures of two or more of them as a base oil and an additive specified in the present application.

Also, the above document describes using the above composition for gear oil, lubricating oil for slide guides, and hydraulic oil.

B. The invention described in claim 3 does not appear to involve an inventive step based on documents 1-14.

No particular difficulty is found in using the lubricative composition described in documents 1-13 for lubricating paper machines.